TREATMENT PROTOCOL: NON-TRAUMATIC CARDIAC ARREST (ADULT) *

1. Basic airway
2. If arrest not witnessed by EMS:
   CPR for 2min at a compression rate of at least 100/min, minimize interruptions to chest compressions
3. Cardiac monitor: document rhythm and attach ECG strip
4. If asystole, confirm in more than one lead
5. If fine V-Fib is suspected, treat with V-Fib/Pulseless V-Tach

A 12-lead ECG shall be acquired on patients who complain of chest pain/discomfort of suspected cardiac etiology, non-traumatic post cardiac arrest patients with a return of spontaneous circulation (ROSC) and/or patients who the paramedics suspect are experiencing an acute cardiac event.

ASYSTOLE / PEA

6. If confirmed PEA, consider causes ❶
7. Venous access, if unable:
   place IO (if available)
8. **Epinephrine** (1:10,000) ❹
   1mg IV or IO
9. Consider advanced airway ❷,
   capnography
10. If narrow complex and heart rate greater than 60bpm:
    Normal saline fluid challenge
    10ml/kg IV or IO at 250ml increments
11. CPR for 2min
12. **CONTINUE SFTP or BASE CONTACT**
13. **Epinephrine** (1:10,000)
    1mg IVP or IO
    May repeat every 3-5min
14. If down time greater than 20min:
    Sodium bicarbonate
    1mEq/kg IV push
    May repeat 0.5mEq/kg every 10-15min
15. If resuscitative efforts are successful:
    Perform 12-lead ECG ❽
16. If resuscitative efforts are unsuccessful:
    contact the base hospital to consider pronouncement ❼

V-FIB / PULSELESS V-TACH

6. Defibrillate ❺❻
   Biphasic at 120-200J (typically)
   Monophasic at 360J
7. CPR for 2min
8. Venous access, if unable:
   place IO (if available)
9. Check rhythm ❸, and if indicated:
   Defibrillate
   Biphasic at 200J, monophasic at 360J
10. CPR for 2min
11. **Epinephrine** (1:10,000) ❹
    1mg IVP or IO
12. Consider advanced airway ❷,
    capnography
13. Check rhythm, and if indicated:
    Defibrillate
    Biphasic at 200J, monophasic at 360J
14. CPR for 2min
15. **CONTINUE SFTP or BASE CONTACT**
16. **Amiodarone**
    300mg IV or IO
17. CPR for 2min
18. Check rhythm, and if indicated:
    Defibrillate
    Biphasic at 200J, monophasic at 360J
19. **Epinephrine** (1:10,000)
    1mg IVP or IO
    May repeat every 3-5min
20. CPR for 2min
21. Check rhythm, and if indicated:
    Defibrillate
    Biphasic at 200J, monophasic at 360J
22. **Amiodarone**
    150mg IV or IO
    Maximum total dose 450mg
23. CPR for 2min
24. Check rhythm, and if indicated:
    Defibrillate
    Biphasic at 200J, monophasic at 360J
25. If resuscitative efforts are successful:
    Perform 12-lead ECG ❽

TREATMENT PROTOCOL: NON-TRAUMATIC CARDIAC ARREST (ADULT) *

26. If resuscitative efforts are unsuccessful: contact the base hospital to consider pronouncement ❼

SPECIAL CONSIDERATIONS

❶ Consider causes of PEA: acidosis; cardiac tamponade; drug overdose; hyperkalemia; hypothermia; hypovolemia; hypoxia; massive MI; pulmonary embolus; or tension pneumothorax

Drugs to consider for specific suspected causes:

If hypoglycemia is suspected:
DEXTROSE (50%)
50ml IV or IO

If narcotic overdose is suspected:
NARCAN (naloxone)
0.8-2mg IV or IO
2mg IN or IM

If dialysis patient:
CALCIUM CHLORIDE - BASE CONTACT REQUIRED
1gm IV or IO

SODIUM BICARBONATE – BASE CONTACT REQUIRED
1mEq/kg IV or IO

If tricyclic overdose suspected:
SODIUM BICARBONATE – BASE CONTACT REQUIRED
1mEq/kg IV or IO

If calcium channel blocker overdose suspected:
CALCIUM CHLORIDE – BASE CONTACT REQUIRED
1gm IV or IO

❷ Attempt to limit interruptions in CPR to no more than 10sec with advanced airway. Should utilize end tidal CO_2 monitoring for advanced airway and monitoring ROSC.

❸ Pulse check if a change in ECG rhythm, take no longer than 10sec to check for a pulse. If no pulse is detected within 10sec, resume chest compressions.

❹ If hypothermia is suspected, administer only one dose of epinephrine and **no other medications** until the patient is re-warmed

❺ Biphasic defibrillator settings may vary; refer to manufacturer's guidelines. If unknown, use 200J for biphasic, 360J for monophasic

❻ If hypothermia is suspected, defibrillate only once until the patient is re-warmed

❼ If hypothermia is suspected, resuscitation efforts should not be abandoned until the patient is re-warmed, or the base hospital orders termination of resuscitative efforts

❽ Post cardiac arrest patients with ROSC, with or without a 12 lead ECG analysis equivalent to "Acute MI", shall be transported to the most accessible open SRC if ground transport is 30 minutes or less regardless of service agreement rules and/or considerations.